Effect of Asanas, Pranayamas and Kriyas on Cognitive and Physiological variables of Women

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Introduction

Yogasana is a term for the different postures that consist the central point of workout of yoga. There are different postures for a different system of yoga training yoga engulfs a holistic aspect of an athletics health and no just postures.

Yogasana consists of two Sanskrit words yoga and asana. Yogasana emphasizes on the physical body and stands for the various postures. This is called hatha yoga but hatha yoga is not just about postures along with the postures, adequate meditation and breathing is also inculcated into it. Athletics derive an enormous amount of benefits from the Hatha yoga practice.

Flexibility is the ability to stretch and bend the body in varying angles that helps in the loosening and relaxing of muscles and tendons. With constant practice flexibility can be achieved through yoga and prove to be a great asset for athletes. The athletes also need to stretch their body beyond normal during sports and hence yoga provides them an opening to practice against gravity and hold postures for an extended amount of time. Doing so gives the athletes an upper hand in a Muscular workout and increases their muscle endurance as well.

Benefits of Asanas for sports

- Balance, flexibility core strength and muscular endurance can be improved through practice of Asanas.
- The risk of sport related injuries can be brought down to a level and the healing duration speeds up for athletes who practice Asanas.
- athletes tend to given their best during performance and often under pressure yoga helps them to reduce performance anxiety and improve anxiety through deep breathing techniques
- Core strength is an indicator of a person's fitness increased core strength leads to better resistance against workouts on mechanics.
- Gradual Asanas training increases flexibility and range of motion by relaxing and loosening the muscles tension.

- Balance is often underestimated by athletes as muscle imbalance and body mechanic problems leads to poor performance balance exercises through Asanas.can be indicated for better body balance.
- Hundreds of postures relieves athletes from boredom and give them a great cross training especially for those who play the same sports or exercises routine throughout the year.

Pranayama

Pranayama is composed of Sanskrit word prana + ayama prana is universal life force and it is responsible for keeping us alive ayama has two different meanings to stretch and to control. Hence the word pranayama means the ability to stretching Our life force by controlling the breath the techniques of pranayama involves controlling the breath in variety of ways in pranayama specific point of force within the body or the left/right nostril and the duration of the breath and the number of inhalation and exhalation. The guidelines, of breathing techniques have been highlighted in the hath yoga.

Benefits of Pranayama

• Improves breathing – Breathing is the indication of life. But the way one breathes depicts the person's health. Pranayama helps improve breathing and along with that when breathe the oxygen it is taken to right places so that the inner cells are energized to function properly. It releases stress from the heart muscles as well as calms down the brain as well.

• Has anti-aging effects – In this world of cosmetics and countless anti-aging products, pranayama is a method that provides one the inner glow and charm that no other cosmetics can offer no matter how costly the cream or the treatment is. The inner truth is that anything that lasts long depends on the way one breath. One can have a look at the skin of people who practice pranayama regularly.

• Enhances immunity – Regular practice of pranayama helps to improve overall health as all body parts get more oxygen and energy and the toxins are washed off automatically. The resistance power of the body gets enhanced by the rejuvenation of the cells and it helps fight with diseases. This is the main reason why improvement in health of cancer patients is observed.

• It improves cardiovascular health – Since pranayama is centered to breathing activity, it improves the cardiovascular health of the person who practices pranayama daily like

anulom vilom and bhastrika. All the body cells get revitalized and there is amazing improvement in the blood circulation. This helps stabilize the heart palpitation and hence controls blood pressure.

• Improves mental sharpness – Daily practice of pranayama improves concentration in the individual and helps one remain calm in adverse conditions as well. Those who feel distracted easily or are not able to concentrate at work find the difference from the very first week. If parents initiate and ask their children to practice pranayama regularly, it is definitely going to help them a lot.

• Improves the digestive system – Since certain pranayama like kapalabhaati, agnisaar and bahya, provide exercise to stomach muscles and the gastrointestinal tract, people suffering from any kind ofdigestive problem gets benefited by it. The medicine intake comes downautomatically and the person feels more energetic and revitalized from within.

Kriyas

In Sanskrit, “Kri” means “act” and “Ya” means “soul”. Therefore, Kriya in Sanskrit means an act or a completed action for the experience of the Divine. Kriya Yogarefers to a technique or practice that is supposed to achieve a specific result. It is a scientific technique of meditation that helps in the development of the mind, the body, the soul and the intellect. It combines the essence of many other Yoga techniques through the practice of which a person can go beyond the body sense, thoughts and sense organs. It includes many concentration and breathing exercises as well as simple body exercises. The objective of practicing this technique is the transformation of one’s life energy into a higher form of awareness, i.e., the supreme (or the highest) state of cosmic awareness.

Yogic science gives as much importance to certain cleansing processes as it does to asana or pranayama. Without regular cleansing of the system one cannot gain maximum benefit from yoga practices. Without purification of the body one will not be ready for the higher practices of yoga.

Body cleansing is brought about by the practice of the shatkarmas or six purificatory techniques which are very important from the point of view of physical and mental health.

These simple techniques are also highly valuable in healing internal disorders. There are six main groups of shatkarmas or yogic cleansers as follows:

1. Neti: nasal cleaning, including jala neti and sutra neti.
2. Dhauti: cleansing of the digestive tract.
3. Nauli: abdominal massage.
4. Basti: colon cleaning.
5. Kapalbhati: purification and vitalisation of the frontal lobes.
6. Trataka: blinkless gazing.

Each of these groups contains more than one practice, such as jala neti, vaman dhauti (or kunjal kriya), moola shodhana etc. They are all excellent practices designed to purify the whole body and bring about first-class health. They also bring clarity and harmony to the mind.

Benefits of Kriya

Kriya is a technique of pranayama. This has lot of positive effect on the heart and lung. It has capacity to cure ailments related to digestion. In addition to that it has profound impact on liver, kidney, pancreas and other important organs. Kriya Yoga has tremendous impact on harmone flow in women such as estrogen and progesterone.
Kriya yoga helps get rid of deeply entrenched bad habits and if one keep practicing he/she ultimately get success in eradicating those bad habits.

Physical benefits

- Betters the physical health and deep impact on the process of digestion.
- Enhanced flexibility of muscles and spines
- Relaxation of muscles
- Reduces stress
- Improves health and well-being
- More energy
- Strengthens immune system
- Reduces cholesterol levels

Mental health benefits

- Greater creativity
- Greater clarity of mind
- Improves sleep
- Enhances brain function
- Improves ability to manage challenging situations

Improved interpersonal relations

- More ease, joy and harmony in personal and work relationships
- A deeper sense of community
- Increases awareness both of self and surroundings
- Improves patience
- Increases confidence and self-esteem

Psychological benefits

- Relieves depression and anxiety
- Relief from anxiety and depression (mild, moderate, and severe)

Spiritual benefits

- Enhances yoga and meditation practices
- Experience a deep inner peace of mind

The researcher wanted know the effect of 16 weeks of training effect of cognitive, and physiological variables.

Statement of the Problem

The Purpose of the study is to find out the "**Effect of Asanas , Pranayama and Kriyas on Cognitive and Physiological variables of Women".**

Objectives of the Study

• To find out the effects of Asanas on cognitive development.

• To find out the effects of pranayama on cognitive development

• To find out the effects of kriyas on cognitive development.

• To find out the Effect of Asanas on physiological development of women.

To find out the Effect of pranayama on physiological development of women.

• To find out the Effect of kriyas on physiological development of women.

Delimitations of the Study

- For the purpose of the study, 120 female students in the age Group ranging from 19 to 23 years will be randomly selected as subjects.
- The Selected subject will be chosen from Bangaramma sajjan Arts and Commerce College for women, Vijayapura karnataka.
- The duration of the experimental period will be Restricted to 16 weeks. The number of sessions per week for the Experimental group will be confined to six days.

Limitations of the Study

- The daily routine work of the subjects influenced results, hence this will be considered as limitation.
- The climatic conditions at the time of conducting the test influenced the performance of the Subjects will be considered as limitation.
- The general mood of the subjects Environmental factors and performance in the test by the subject will be recognized as limitation of the study due to varied social, cultural and environmental factors will be not be taken into consideration.
- No motivational techniques will be used for the collection of data.

Hypothesis

It is hypothesized that the Asanas, Pranayamas and Kriyas training improves the Following Cognitive and Physiological Variables.

- It is hypothesized that Sixteen weeks of Asana and pranayama training develops Long term memory and intelligence.
- It is hypothesized that sixteen weeks of Asana and pranayama training reduce the Resting pulse rate .
- It is hypothesized that Sixteen weeks of Asana and Pranayama training develops maximum oxygen consumption (Vo2max).
- It is hypothesized that Sixteen weeks of Kriyas training develops Long term memory and Intelligence.
- It will be hypothesized that sixteen weeks of Kriyas training reduce the Resting pulse rate .
- It is hypothesized that Sixteen weeks Kriyas training develops maximum oxygen consumption (Vo2max).

Significance of the Study

- The study helps physical education teachers, coaches and trainer to make use of Asanas, Pranayamas and Kriyas training improve the cognitive performance of the subjects.
- The study helps to assess the development of Long term memory and Intelligence performance of the subjects.
- The study helps to assess the development resting pulse rate and Vo_2 max performance of the subjects.
- The study throw light on the level of Physiological performance of the subjects.

REVIEW OF RELATED LITERATURE

The Researcher has made sincere efforts to collect the review of literature Related to this study and found some References to similar studies which have been reviewed are produced in this chapter.

Review of related literature is very important and it plays a vital role to understand the problem thoroughly. In the present chapter the investigator is made an attempt to report the literature based upon the effects of different Pranayama and Kriyas practice.

Santosh, K. Kohli, T. and Batani, D. (2005) evaluated the impact of yogic shatkriyas and pranayama on stress of senior secondary students. The sample of the present comprised 60 secondary school students, with high academic records. The pre and post experimental and control group design was followed. There were two experimental and one control group. One group was provided training through shatkriyas and other through pranayama. Control group was not provided any training. Shatkriyas and Pranayama both reduce all the components of academic stress of students with equal effectiveness except academy anxiety which was reduced more effectively by Pranayama as compared to Shatkriyas

Amutha,(2010) conducted study to find out the effect of selected yogic exercise and pranayama on anxiety, VO2max and flexibility. For this purpose fifty male students were selected from various high and higher secondary schools in and around Chidamabaram town. They were divided into two equal groups. One as experimental group doing underwent training for nine weeks, weekly five days, Monday to Friday between 6.00 a.m to 8.00 a.m. and control group (n=25) did not participate in any special training. The result of the study indicated that the anxiety was reduced significantly, maximal oxygen uptake and the flexibility increased significantly for the training group. It was concluded that the yogic exercise and had reduced the anxiety and increased the maximal oxygen uptake and flexibility.

METHODOLOGY

The Methodology adopted in the Present study is Related to the selection of subjects, selection of variables, selection of tests, Experimental Design, Orientation of the subjects and statistical technique.

Selection of Subjects

The Purpose of the study is to find out the **Effect of Asana, Pranayama and Kriyas on Cognitive and Physiological variables of Women.** To achieve this purpose 120 female students in the age group ranging from 19 to 23 years studying in Bangaramma sajjan Arts and Commerce College for women, Vijayapura. Karnataka state will be selected randomly as subjects will be divided into three equal group such as Asanas, pranayamas and Kriyas group and control groups.

Selection of Variables

Independent Variables

Asanas

Padmasan,

Vajrasan,

Vakrasana

Tadasana,

Vrikshasana

Shavasana,

Naukasana,

Halasana

Makarasana,

Bhujanagasana

,Dhanurasana

Pranayama

- Anuloma viloma
- Sheetali
- Shetkari
- Bhramari Pranayama

Kriyas

- Jalneeti
- Trataka
- kapalbhati

Dependent variables

Cognitive variables

- Long term Memory
- Intelligence

Physiological variables

- Resting pulse rate
- Maximum oxygen consumption (Vo2 max)

Experimental design

The selected subjects (N=120) will be divided into four equal groups as Asanas group I, pranayamas group II. Kriyas group III and control group IV. Group I undergo Asana training, group II underwent pranayama training, group III undergo Kriyas training and control group VI will not undergo any kind of training.

Selection of Tests

The selection of tests and the criterion variables are presented in the Following table.

Cognitive Variables

Sl. No	Variables	Test items and tools	Criterion Measurement
1	Long term memory	Questionnaire developed by Dr. B.B.Asthana	By using Card related to Questionnaire and the subject's responses within two minute will be recorded
2	Intelligence	Questionnaire developed Dr.P.N.Mehrotra	Cognitive development of the subject as per Questionnaire

Physiological Variables

Sl. No	Variables	Test items and tools	Criterion Measurement
1	Resting pulse rate	Radial Pulse rate	Once pulse is located count the number of beats felt within a one minute period will be recorded.
2	Vo2max	Cooper test12 minutes Run and walk	Distance covered by subject against time taken will be recorded.

Orientation of subjects

The investigator will conducted an orientation with the subjects prior to the administration of test. The purpose, the significance of the study and the requirements of the testing procedure will be explained to them in detail so that there will be no ambiguity in their minds. The researcher will seek their fullest co-operation during test administration.

Collection of data

The data will be gathered by conducting pre and post test by using questionnaire, for Long term memory and intelligence, for resting pulse rate (radial pulse rate) will be taken and maximum oxygen consumption (Vo2max), 12 minute run and walk test will be conducted.

Statistical Technique

As per the objectives of the research study mean, SD and ANOVA will be applied to find out the differences among Asana group I Pranayama group II. kriyas group III and control group IV.